CENTRAL PNEUMATIC®
Professional

CONCRETE "T" NAILER (3/4" TO 2-1/2")

Model 97512
90342

ASSEMBLY and OPERATING INSTRUCTIONS

Diagrams within this manual may not be drawn proportionally.
Due to continuing improvements, actual product may differ slightly from the product described herein.

Distributed exclusively by Harbor Freight Tools®.
3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our website at: http://www.harborfreight.com

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

Copyright© 2007 by Harbor Freight Tools®. All rights reserved. No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.

For technical questions or replacement parts, please call 1-800-444-3353.

Specifications

Recommended Air Pressure	85 - 115 PSI
Maximum Air Pressure	115 PSI
Air Inlet	1/4” - 18 NPT
Nail Capacity	3/4” to 2-1/2” T Nails
Magazine Capacity	80 (Side Load)
Air Consumption	7.4 CFM
Includes: Case, Coupler Plug, 3 Hex Keys, Tool Oil, OSHA Approved Goggles,	

Replacement nails available at Harbor Freight Tools: #90375 - 3/4”, 13G, 2000 Pack; #90376 - 1”, 13G, 2000 Pack; #90377 - 1-1/2”, 13G, 1000 Pack

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

1. **Keep work area clean**. Cluttered areas invite injuries.
2. **Observe work area conditions**. Do not use machines or power tools in damp or wet locations. Don’t expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away**. Children must never be allowed in the work area. Do not let them handle machines, tools, extension cords, or air hoses.
4. **Store idle equipment**. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Use the right tool for the job**. Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
6. **Dress properly**. Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
7. **Use eye and ear protection**. Always wear ANSI approved impact safety goggles. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI

approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.

8. **Do not overreach**. Keep proper footing and balance at all times. Do not reach over or across running machines or air hoses.
9. **Maintain tools with care**. Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords and air hoses periodically and, if damaged, have them repaired by an authorized technician. The handle must be kept clean, dry, and free from oil and grease at all times.
10. **Disconnect air supply**. Disconnect air hose when not in use.
11. **Remove adjusting keys and wrenches**. Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
12. **Avoid unintentional starting**. Be sure the switch is in the Off position when not in use and before plugging in. Do not carry any tool with your finger on the trigger, whether it is plugged in or not.
13. **Stay alert**. Watch what you are doing, use common sense. Do not operate any tool when you are tired.
14. **Check for damaged parts**. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
15. **Guard against electric shock**. Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
16. **Replacement parts and accessories**. When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
17. **Do not operate tool is under the influence of alcohol or drugs**. Read warning labels if taking prescription medicine to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not operate the Concrete Nailer.
18. **Use proper size and type extension cord**. If an extension cord is required, it must be of the proper size and type to supply the correct current to the tool without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the tool. Check your air compressor’s manual for the appropriate size cord.
19. **Maintenance**. For your safety, maintenance should be performed regularly by a qualified technician.
20. **Compressed air only**. Never use combustible gases as a power source.

SPECIFIC PRODUCT WARNINGS AND PRECAUTIONS

1. **Important consumer information: This Nailer is equipped with a contact trip Trigger.** This Trigger mechanism is designed primarily for high volume work where exact placement of the nail is not critical. By holding the Trigger, the Nailer will fire each time the nosepiece contacts the wood. A characteristic of this design is the tendency to "double fire" if used to shoot one Nail at a time. This can be caused by the recoil produced and lingering finger pressure on the Trigger. To avoid this occurrence, hold the Nailer firmly against the wood and give the Trigger one quick squeeze. A single shot Nailer, equipped with a sequential trip Trigger, may be considered if high volume, rapid nailing is not required. Failure to understand its operating characteristics, or careless use, can result in property damage and/or serious personal injury.
2. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris.
3. **Maintain labels and nameplates on the Nailer.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
4. **Use only clean, dry, regulated, compressed air at between 85 to 115 PSI.** Never use oxygen, carbon dioxide, combustible gases, or any other bottled gas as a power source for this tool.
5. **When connecting to the air supply:** Prior to each use, if an automatic oiler is not used, add two drops of air tool oil into the Coupler Plug (part #73) of the Nailer. Attach the air compressor hose to the Air Plug. Turn on the air compressor, and set the regulator to the recommended **85 to 115 PSI** for this tool.
6. **Disconnect the air supply hose to the Nailer before loading the nails to prevent a nail from being accidentally fired during connection.** The Nailer's driving mechanism may cycle when the tool is connected to the air supply hose. When not in use, remove all nails from the Fixed Magazine (part #49) of the Nailer.
7. **To prevent accidental firing, do not load nails with the Trigger (part #37) depressed.**
8. **Remove your finger from the Trigger (part #37) when not driving nails.** Never carry the tool with your finger on the Trigger. The tool will fire a nail every time the nosepiece contacts the wood.
9. **Always assume the Nailer contains nails.** Keep the tool pointed away from yourself and others at all times.
10. **Never use the Nailer if the Trigger (part #37), or Safety Bracket (part #41), is damaged.** Do not alter or remove the Safety Bracket. Make daily inspections for free movement of the Trigger and Safety Bracket mechanism.
11. **Grip the Nailer firmly with both hands to maintain control, while allowing the tool to slightly recoil away from the workpiece as a nail is driven.**

12. **Do not drive nails on top of other nails, or with the tool at too steep an angle.** The nails can ricochet, causing personal injury.
13. **Do not drive nails close to the edge of a workpiece.** The workpiece is likely to split, allowing the nail to fly free or ricochet and cause personal injury.
14. **Always keep hands and feet away from nose of the Nailer.**
15. **Make sure all adjusting Wrenches (part #96) are removed from the Nailer before using.**
16. **Only use an air supply hose that is rated for a minimum working pressure of 150 PSI or greater.**
17. **Always disconnect the Nailer from its air supply hose before performing inspection or maintenance on the tool, clearing a jammed nail, leaving the work area, moving the tool to another location, or handing the tool to an other person.**
18. **After disconnecting the Nailer from the compressor,** there still could be enough air pressure to fire the Nailer.

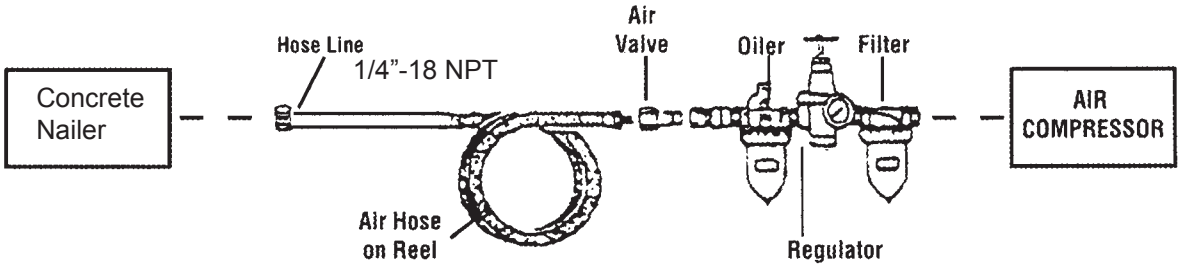
Note**: Performance of the compressor (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.**

Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Unpacking

When unpacking, check to make sure the parts listed on page 9 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

Air Connection Setup



Recommended Air Line Components

For best service you should incorporate an oiler, regulator, and inline filter, as shown in the diagram above. Hoses, couplers, oilers, regulators, and filters are all available at Harbor Freight Tools.

1. You will need to prepare a 1/4" coupler plug (included) to connect to the air inlet on the Concrete Nailer. First, wrap the 1/4" coupler plug (included) with pipe thread seal tape before threading it into the **Air Inlet (#54)**. Connect the 3/8" ID Air Source Hose (not included) from the Air Compressor to the Concrete Nailer.
   Note: If you are not using an automatic oiler system, before operation, add a few drops of Pneumatic Tool Oil to the airline connection. Add a few drops more after each hour of continual use.
2. Set the air pressure on your compressor to a level between 85-115 PSI. Do not exceed the maximum air pressure of 115 PSI.
3. Check the air connection for leaks.

Operation

Adjust **Exhaust Cover (#4)** so it sends the exhaust away from you.

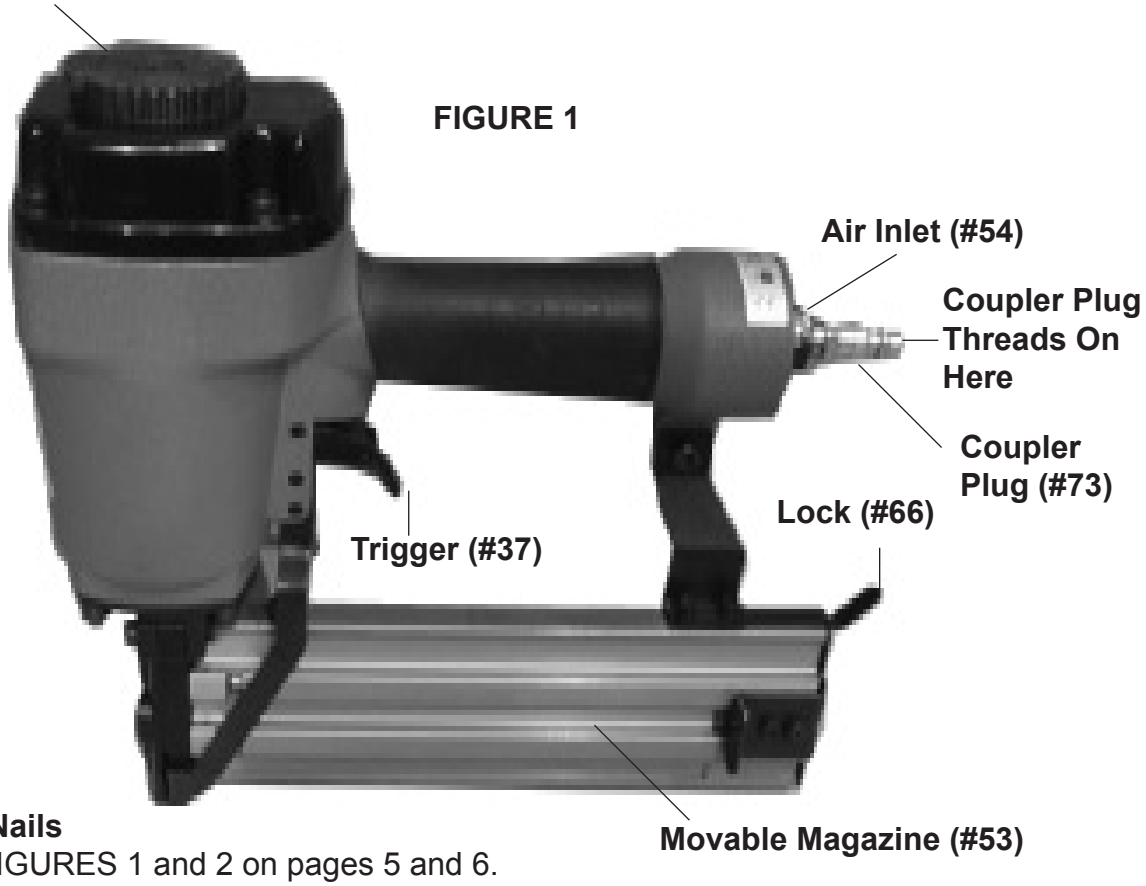


FIGURE 1

Loading Nails

Refer to FIGURES 1 and 2 on pages 5 and 6.

Nailer Specific Warnings!

a. **Warning! Disconnect the Nailer from the air compressor whenever loading or servicing. After disconnecting the Nailer from the air compressor, there could still be enough air pressure to fire the Nailer. After the air compressor hose is disconnected, always fire the trigger repeatedly to make sure all of the air is expended.**

b. Never point the tool at bystanders or pets when it is loaded with nails.

c. Do not press the **Trigger (#37)** when you are loading nails.

d. If nails become jammed, always disconnect from the air source before attempting to clear jams.

Refer to **FIGURE 2** on page 6.

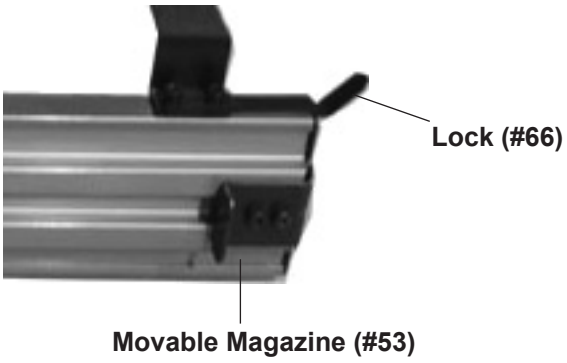
1. Push on the **Lock (#66)** with your thumb while simultaneously pulling back on the **Movable Magazine (#53)**.

2. Place a full clip of the specified type and size nails sideways, with the point facing down, on the **Fixed Magazine (#49)**. Do not exceed the 80 nail maximum capacity.

3. Push the **Movable Magazine (#53)** forward until it locks into place.

Operation (continued)

FIGURE 2



Operating the Concrete Nailer

1. With the tool disconnected from the air supply, load nails as explained on page 5. Then, connect the Concrete Nailer to the air supply.
2. Before using the Nailer each time, check the driving depth by firing a nail into a scrap piece of wood. If the nail is driven too far, or not far enough, adjust the air flow on your air compressor to provide more or less air pressure. **Never exceed the maximum air pressure of 115 PSI**.
3. **To place and shoot a single nail,** grip the nailer without touching the trigger, and position the nosepiece on the wood. With your free hand, press down on the top of the nailer. Give the trigger a quick pull and release. **For rapid operation,** grasp the nailer firmly and pull the trigger. Push the nailer quickly and firmly against the wood. The nailer will fire as soon as the safety is depressed. Move quickly to the next nailing location, and repeat. These techniques require some familiarity and practice. **Remember that recoil, holding the trigger too long, or striking a previously driven nail or hidden object, may cause double-firing. This is not a mechanical defect.**
4. When you are finished, disconnect the Concrete Nailer from the air supply.

Warning! After disconnecting the Nailer from the air compressor, there could still be enough air pressure to fire the Nailer. After the air compressor hose is disconnected, always fire the trigger repeatedly to make sure all of the air is expended.

Clearing Jams

1. Disconnect tool from air hose. Always fire the trigger repeatedly to make sure all of the air is expended from the Nailer.
2. If a nail is jammed in the discharge area, simply remove it with pliers.
3. If a nail is jammed in the magazine, push on the **Lock (#66)** with your thumb while simultaneously pulling back on the **Movable Magazine (#53)**. Remove the jammed nails and push the **Movable Magazine (#53)** forward until it locks into place (Figure 2).

Troubleshooting

Warning! If you detect any air leaks, power loss, the Nailer skips driving, drives too deep, or not deep enough, take the Nailer to an qualified service technician for repair.

Note: Have the following problems repaired by a qualified service technician.

1. **Problem**: Air leaking at trigger valve area.
   Probable Cause: Damaged 0-rings in trigger valve housing.
   Solution: Replace 0-rings. Then recheck contact safety trip mechanism.
2. **Problem:** Air leaking between housing and nose.
   Probable Cause: Loose screws in housing, damaged 0-rings or bumper.
   Solution: Tighten screws or replace 0-rings or bumper.
3. **Problem:** Air leaking between housing and cap.
   Probable Cause: Loose screws or damaged gasket.
   Solution: Tighten Screws or replace gasket.
4. **Problem:** Runs slowly or has power loss.
   Probable Cause: Nailer insufficiently oiled, broken spring in cylinder cap, exhaust part in cap is blocked.
   Solution: Lubricate as instructed, install new spring, Replace damaged internal parts.
5. **Problem:** Nailer skips driving nails.
   Probable Cause: Worn or dirty bumper, damaged pusher spring, inadequate air flow, worn or dry 0-ring on piston, damaged 0-ring on trigger valve, cap gasket leaking.
   Solution: Replace bumper or pusher spring, clean bumper and drive channel, check fittings, replace or lubricate 0-rings, replace gasket.
6. **Problem:** Nails are jammed in Nailer nose.
   Probable Cause: Guide on driver is worn. Wrong size or damaged nails, loose magazine or nose screws, damaged driver.
   Solution: Replace guide, use recommended, undamaged nails, tighten screws, replace driver.
7. **Problem:** Nail will not drive down tight.
   Probable Cause: Defective nail tip causing slippage, power loss, slow cycling and power loss.
   Solution: Replace nails, adjust air pressure, check spring under cap for broken coils or reduce length, check if cap in exhaust port is restricted.
8. **Problem:** Driving nail too deeply.
   Probable Cause: Worn bumper or piston spacer.
   Solution: Replace either or both parts.

Warning! Disconnect the Nailer from the air compressor whenever loading or servicing. After disconnecting the Nailer from the air compressor always fire the trigger repeatedly to make sure all of the air is expended.

Maintenance

Warning! Always disconnect the tool from the air compressor and then empty the magazine of nails before attempting to inspect or perform maintenance to the Nailer.

1. Inspect all of the nuts and screws and make sure they are securely fastened.
2. Periodically lubricate the driving mechanism and magazine with a light oil (included). Wipe down with a clean cloth. Never use gasoline or flammable solvents to clean the tool.
3. Inspect your air compressor according to manufacturer's instructions.

Warning! If you detect any air leaks, power loss, the Nailer skips driving, drives too deep, or not deep enough, take the Nailer to a qualified service technician.

Parts List

Part	Description
1	Screw
2	Spring Washer
3	Bushing
4	Exhaust Cover
5	Washer
6	Screw
7	Spring Washer
8	Cylinder Cap
9	Gasket
10	0-ring
11	0-ring
12	Spring
13	Valve
14	Cylinder Seal
15	0-ring
16	Valve Seal
17	Seal
18	Washer
19	0-ring
20	Piston Assembly
21	0-ring
22	Cylinder
23	Sealed Belt
24	Bumper
25	Body

Part	Description
26	0-ring
27	Base
28	Screw
29	Plate
30	Front Plate
31	Screw
32	Locking Washer
33	Pin
34	Safe Guider
35	Pin
36	Trigger Spring
37	Trigger
38	Guide Body
39	Screw
40	Pin
41	Safety Bracket
42	Seal
43	Trigger Valve Head
44	Spring
45	0-ring
46	Trigger Valve Stem
47	0-ring
48	Trigger Valve Guide
49	Fixed Magazine
50	Rail

Part	Description
51	Feeder Shoe
52	Pin
53	Movable Magazine
54	Air Inlet
55	End Cap
56	0-ring
57	Soft Grip Sleeve
58	Nut
59	Screw
60	Spring Washer
61	Screw
62	Support
63	Screw
64	Spring Retainer
65	Nut
66	Lock
67	Torsion Spring
68	Locking Washer
69	Pin
70	Spring
71	Stopped Plate
72	Screw
73	Coupler Plug

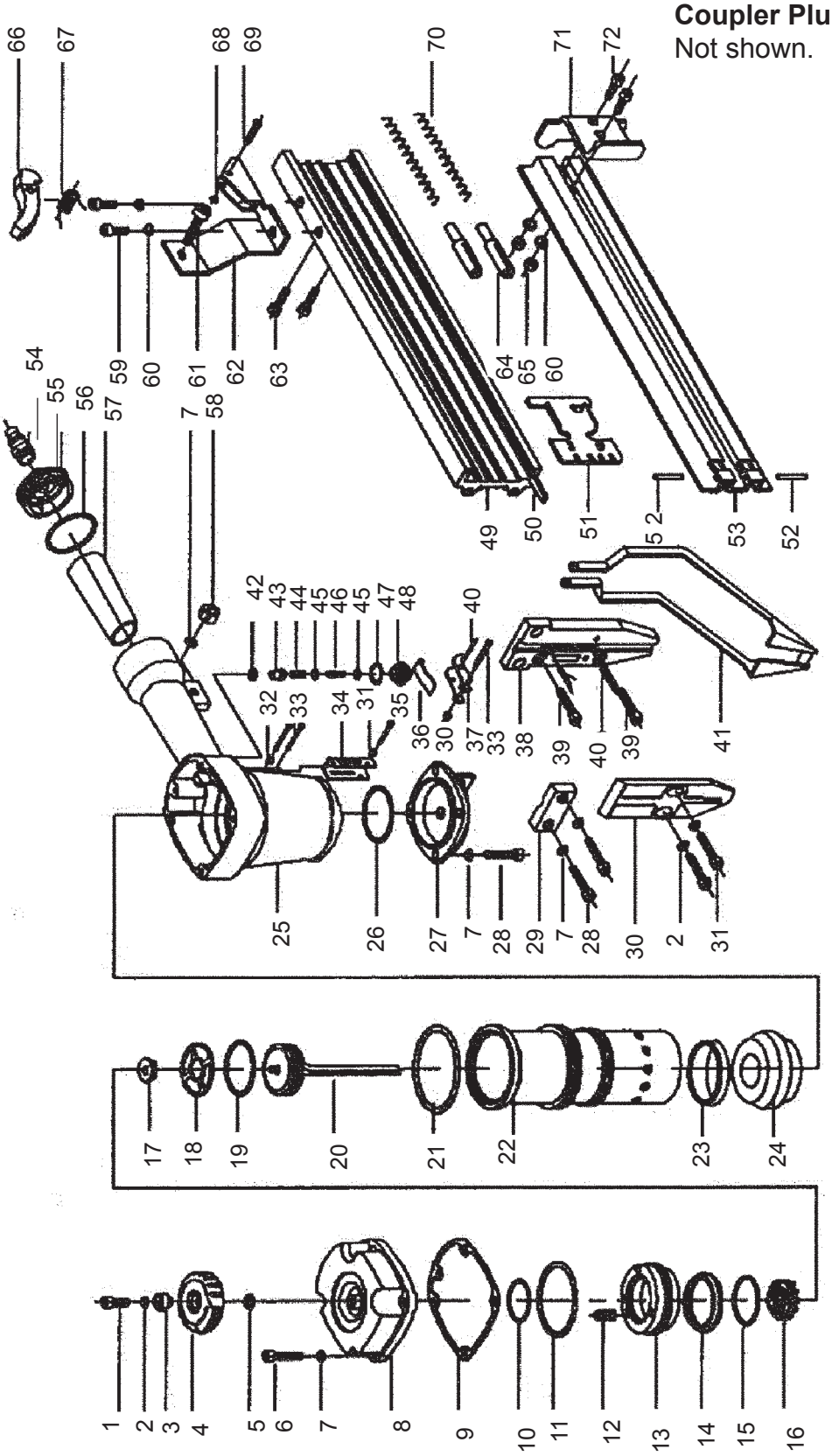
PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

Assembly Drawing

Coupler Plug (#73)
Not shown.



90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

3491 Mission Oaks Blvd. • PO Box 6009 • Camarillo, CA 93011 • (800) 444-3353